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#### PATENT COOPERATION TREATY

### **PCT**

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Palent Cooperation Treaty)

(PCT Article 36 and Rule 70)

C-396	FOR FURTHER ACTION	See Form PCTAPEARIE
International application No. PCT/EP2004/052894	International (Cng date (deyshlors/lyear) 09.11.2004	Priority date (day/monthlyear) 11.11.2003
International Petent Classification (IF C07C231/02, C07C231/24, C	PC) or national classification and IPC 07C233:08	
AppRoant ZAMBON GROUP S.P.A.		
Authority under Article 35 a	nal preliminary examination report, established and transmitted to the applicant according to Art	by this international Preliminary Examining icle 36.
2. This REPORT consists of a	s total of 4 sheets, including this cover sheet,	
	anied by ANNEXES, comprising:	
	t and to the International Sureau) a total of she	
sheets of the de andbrisheets co Administrative in	escription, claims and/or drawings which have be ontaining rectifications authorized by this Author instructions).	sen amended and are the basis of this report rity (see Rule 70.16 and Soction 607 of the
☐ sheets which su	spersede earlier sheets, but which this Authority dosure in the international application as filed, a low	considers contain an amendment that goes s indicated in Item 4 of Box No, I and the
Supplemental 6		
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AP20 Rec'd PG1/PTO 09 MAY 2895

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No PCT/EP2004/052894

	Box No. I Basis of the report
1. V	With regard to the language, this report is based on the international application in the language in which it was led, unless otherwise indicated under this item.
C	<ul> <li>This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:</li> <li>□ international search (under Rules 12.3 and 23.1(b))</li> <li>□ publication of the international application (under Rules 12.4)</li> <li>□ international preliminary examination (under Rules 55.2 and/or 55.3)</li> </ul>
h	Vith regard to the elements" of the international application, this report is based on <i>(replacement cheets which</i> ave been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this eport as "originally filed" and are not annexed to this report):
D	escription, Pages
1-	-7 as originally illed
c	laims, Numbers
	25 as originally filed
	a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
<b>3.</b> □	<ul> <li>The amendments have resulted in the cancellation of:</li> <li>□ the description, pages</li> <li>□ the claims, Nos.</li> <li>□ the drawings, sheets/figs</li> <li>□ the sequence listing (specify):</li> <li>□ any table(s) related to sequence listing (specify):</li> </ul>
4. □ has s	ad not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the upplemental Box (Rule 70.2(c)).  If the description, pages the clatins, Nos.  If the drawings, sheetstigs the drawings, sheetstigs and the sequence listing (specify):  any table(s) related to sequence listing (specify):

- FED (18)

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#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/EP2004/052894

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims No: Claims

2-14, 16-25 1,15

Inventive step (IS)

Yes: Claims

No: Claims

1-25

Industrial applicability (IA)

1.25

Yes: Claims No: Claims

2. Citations and explanations (Rule 70.7):

see separate sheet

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# AP20 Rec'd PCT/PTO 09 MAY 2005

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

International application No.

PCT/EP2004/052894

- D1: DATABASE WPI Section Ch. Week 200155 Derwent Publications Ltd., London, GB: Class B05, AN 2001-497525 XP002325720 & CN 1 297 885 A (HANGZHOU SHOUXIN FINE CHEM CO LTD) 6 June 2001 (2001-06-06)
- D2: WO 02/34709 A (ZAMBON GROUP S.P.A; CANNATA, VINCENZO; NICOLI, ANDREA; CORCELLA, FRANC) 2 May 2002 (2002-05-02)
- D3: WO 03/002517 A (BROMINE COMPOUNDS LTD; OREN, JACOB) 9 January 2003 (2003-01-09)
- 1. D1 discloses a process for preparing 1,1-cyclohexanediacetic acid monoamide by amination of 1,1-cyclohexanediacetic acid anhydride at a temperature of 30-110°C. Present claims 1 and 15 seek to distinguish the claimed subject matter from the disclosure of D1 only in terms of the upper limit required to be "lower than 30°C". It is, however, general knowledge that every experimental measurement in quantitative analytical chemistry as well as any result of any physical measurement cannot be dissociated from the margin of uncertainty attached to the measurement. Since the claimed process seeks to distinguish from the disclosure of D1 only in terms of the upper limit required to be "lower" than the value given in D1, the claimed subject matter is still not distinguishable from the prior art disclosed in D1. The subject matter of present claims 1 and 15 is thus considered not to be novel over the disclosure of D1 (PCT Article 33.2).
- 2. D3 discloses the same type of reaction where the reaction temperature is below 20°C (thus within the claimed range), however, the NH<sub>g</sub>/anhydride molar ratio is higher, namely 5 to 10 (see D3: claims 1 to 3).
  Having regard to the disclosure of D1 as well as the disclosure of D3 the subject matter of present claims 1 to 25 is not regarded to be based on an inventive step since it appears that the temperature as well as the molar NH<sub>g</sub>/anhydride ratio can be varied within a great range without being detrimental to the reaction. The skilled person can see from both documents that variation of these two parameters can be done. In addition no unexpected effect has been demonstrated which could be a hint for the presence of an inventive step.

The subject matter of present claims 1 to 25 is thus considered not to be based on an inventive step over the disclosure of D1 and D3 (PCT Article 33.2).

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